

Table 3. B/H ratio for different population. See Table B in S1 Appendix for full references.

population segment	body weight [kg]	age [y]	blood volume [L]	RBC count [$10^{12}/\text{L}$]	colon content [g]	bac. conc. [$10^{11}/\text{g wet}$] ⁽¹⁾	total human cells [10^{12}] ⁽²⁾	total bacteria [10^{12}]	B:H
ref. man	70	20–30	4.9	5.0	420	0.92	30	38	1.3
ref. woman	63		3.9	4.5	480	0.92	21	44	2.2
young infant	4.4	4 weeks	0.4	3.8	48	0.92	1.9	4.4	2.3
infant	9.6	1	0.8	4.5	80	0.92	4	7	1.7
elder	70	66	3.8 ⁽³⁾	4.8	420	0.92	22	38	1.8
obese	140		6.7	5.0 ⁽⁴⁾	610 ⁽⁵⁾	0.92	40	56	1.4

⁽¹⁾ No significant change in bacteria concentrations in relation to high variation for the reference man [40,43].

⁽²⁾ Assuming RBCs account for 84% of the total host cells as observed for the reference man.

⁽³⁾ Decrease of 24% in the blood volume, according to [44].

⁽⁴⁾ No significant change in the hematocrit in obesity [45].

⁽⁵⁾ We could not find any direct measurements of the colonic volume for obese individuals in the literature, yet from an indirect analysis the volume increases with weight and plateaus at about 600 mL [46].

doi:10.1371/journal.pbio.1002533.t003

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